

DECLARATION AND POWER OF ATTORNEY
(Related Application)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

COMPOSITIONS, KITS, AND METHODS FOR PROGNOSTICATION,

DIAGNOSIS, PREVENTION, AND TREATMENT OF

BONE-RELATED DISORDERS AND OTHER DISORDERS

the specification of which is attached hereto and/or was filed on July 28, 2000 as Application No. 09/628,495.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to herein.

I acknowledge the duty to disclose information which is material to patentability in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

FOREIGN PRIORITY APPLICATION(S)

				<u>Priority Claimed</u>
(Number)	(Country)	(Day/month/year filed)		[] Yes [] No
				<u>Priority Claimed</u>
(Number)	(Country)	(Day/month/year field)		[] Yes [] No

I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional patent application(s) listed below and have also identified below any United States provisional patent application(s) having a filing date before that of the application on which priority is claimed.

PROVISIONAL PRIORITY PATENT APPLICATION

			<u>Priority Claimed</u>
60/146,614	July 30, 1999		[X] Yes [] No
(Application No.)	(Filing Date)		
			[] Yes [] No
(Application No.)	(Filing Date)		

I hereby claim the benefit under Title 35, United States Code, Section 120, of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application or in the prior U.S. provisional application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.) (Filing Date) (Status)--(patented, pending, abandoned)

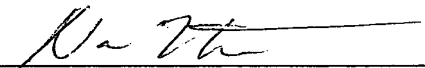
(Application Serial No.) (Filing Date) (Status)--(patented, pending, abandoned)

And I hereby appoint the registered attorneys and agents associated with **AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P., Customer No. 000570**, as my attorneys or agents with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Address all correspondence to **Customer No. 000570, namely, AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P., One Commerce Square, 2005 Market Street, Suite 2200, Philadelphia, Pennsylvania 19103**. Please direct all communications and telephone calls to **GARY D. COLBY, Ph.D., J.D.** at (215) 965-1285.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Full name of sole
inventor, if any David White

Inventor's Signature 

Date 8/9/00

Residence Braintree, Massachusetts

Citizenship U.S.A.

Post Office Address 35 Hollingsworth Avenue; Braintree, MA 02148



10147-1601

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

OCTOBER 31, 2000

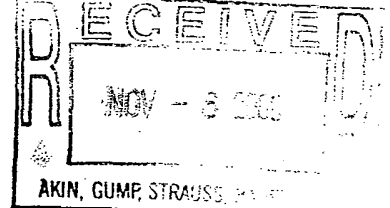
PTAS

AKIN, GUMP, STRAUSS, HAUER & FELD, LLP
GARY D. COLBY
ONE COMMERCE SQUARE - 2005 MARKET STREET
SUITE 2200
PHILADELPHIA, PA 19103



101458454A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT



THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/21/2000

REEL/FRAME: 011063/0688
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

WHITE, DAVID

DOC DATE: 08/09/2000

ASSIGNEE:

MILLENNIUM PHARMACEUTICALS INC.
75 SIDNEY STREET
CAMBRIDGE, MASSACHUSETTS 02139

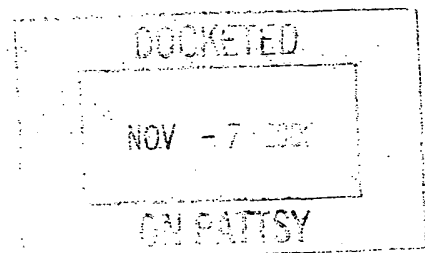
SERIAL NUMBER: 09628495

FILING DATE: 07/28/2000

PATENT NUMBER:

ISSUE DATE:

SHAREILL COLES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



20 8-21-00

ORM PTO-1595 (Modified)
31-92RECORDATION FORM
PATENT

09-18-2000

DEPARTMENT OF COMMERCE
Patent and Trademark Office

101458454

Attorney Docket
No.: 10147-16U1

to the Assistant Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

David White

2. Name and address of receiving party(ies):

Millennium Pharmaceuticals, Inc.
75 Sidney Street
Cambridge, MA 02139

3. Nature of conveyance:

X] Assignment [] Merger
 [] Security Agreement [] Change of Name
 [] Other:

Execution Date: August 9, 2000

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s): 09/628,495
(filed July 28, 2000)

B. Patent No.(s):

Additional numbers attached? [] Yes [] No

5. Name and address of party to whom correspondence document should be mailed:

GARY D. COLBY, Ph.D., J.D.
 AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.
 One Commerce Square - 2005 Market Street - Suite 2200
 Philadelphia, PA 19103
 Telephone: (215) 965-1200
 Direct Dial: (215) 965-1285
 Facsimile: (215) 965-1210
 E-Mail: gcolby@akingump.com

6. Total number of applications and patents involved: [1]

7. Total fee (37 C.F.R. 3.41) Cal. 1 x \$40.00 = \$40.00

[X] Check enclosed
 [] Authorized to be charged to deposit account

8. Deposit account number: 50-1017

(Billing No.:)

DO NOT USE THIS SPACE

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

15/2000 MTHA11 00000526 09628495

FC:581

40.00 OP

Gary D. Colby, Ph.D., J.D.

Name of Person Signing

Signature

Reg. No. 40,961

Date

Total number of pages including cover sheet, attachments and document: [3]

SOLE

ASSIGNMENT

WHEREAS, I, David White, a citizen of The United States of America, with a post office address of 35 Hollingsworth Avenue, Braintree, MA 02148, hereinafter generally referred to as "ASSIGNOR", have invented a certain new and useful

COMPOSITIONS, KITS, AND METHODS FOR PROGNOSTICATION, DIAGNOSIS, PREVENTION, AND TREATMENT OF BONE-RELATED DISORDERS AND OTHER DISORDERS

for which I have executed a United States patent application, Application No. 09/628,495 filed, July 28, 2000 and

ASSIGNOR authorizes **ASSIGNEE** or **ASSIGNEE's** representative to insert the Application Number and Filing date of this application if they are unknown at the time of execution of this Assignment.

WHEREAS, Millennium Pharmaceuticals, Inc., a Delaware corporation having a place of business at 75 Sidney Street, Cambridge, MA 02139, hereinafter generally referred to as "ASSIGNEE", is desirous of acquiring said invention and said patent application.

NOW, THEREFORE, in consideration of the sum of One Dollar and other good and valuable executed consideration, the full receipt and sufficiency of all of which are hereby acknowledged, and intending to be legally bound hereby, I, the undersigned **ASSIGNOR**, hereby agree to sell, assign, transfer and convey and by these presents do sell, assign, transfer and convey unto the above-named **ASSIGNEE**, the whole and entire right, title and interest

in and to said invention as described in the above patent application, for the territory of the United States and its possessions and territories and all foreign countries;

in and to the above patent application and any and all related United States and foreign patent applications disclosing said invention, including provisionals, non-provisionals, divisions and continuations thereof, along with all rights of priority created by said patent application under any treaty relating thereto; and

in and to all United States and foreign patents which may be granted on any and all of said patent applications, including extensions, reissues and reexamination certificates thereof;

said invention, application(s) and patent(s) to be held and enjoyed by the above-named **ASSIGNEE**, for **ASSIGNEE's** own use and benefit, and for **ASSIGNEE's** legal representatives and assigns to the full end of the term or terms for which said patent(s) may be granted, as fully and entirely as the same would have been held by the undersigned **ASSIGNOR** had this

assignment and sale not been made; and for the aforesaid consideration ASSIGNOR hereby covenants, agrees and undertakes to execute, whenever requested by the above-named ASSIGNEE, all patent applications, assignments, lawful oaths and any other papers which ASSIGNEE may deem necessary or desirable for securing to ASSIGNEE or for maintaining for ASSIGNEE all the patent(s) hereby assigned or agreed to be assigned; all without further compensation to the undersigned ASSIGNOR.

8/9/00
(Date)

DAVID WHITE
DAVID WHITE

STATE OF: Massachusetts :
COUNTY OF: Middlesex : ss.

Before me, a notary public in and for the State and County aforesaid, on this 9th day of August, 2000, personally appeared **David White**, who being to me personally known, and who having first executed the foregoing instrument in my presence and have been by me first duly sworn, did acknowledge the foregoing instrument as his free deed and act, signed, sealed and delivered by him for the purpose therein stated and intending to be legally bound thereby and intending that said instrument be recorded.

Simone Corriveau
Notary Public
Simone Corriveau
My Commission Expires: 9/1/2006